

BHP Pet. (Americas) Inc. ERG  
9 Navajo, Apache Cty 687  
SW NE Sec. 26. T41N R30E

COUNTY Apache AREA Teec Nos Pos LEASE NO. 14-20-603-716

WELL NAME Energy Reserves Group, Inc. Navajo-0

LOCATION SW/NE SEC 26 TWP 41N RANGE 30E FOOTAGE 2310 FNL & 1650 FEL

ELEV 5232 GR 5244 KB SPUD DATE 11-21-77 STATUS FAA P/L 11-23-78 TOTAL DEPTH 5840  
COMP. DATE 1-20-78 PBTD 5490

CONTRACTOR Coleman Drilling Company

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY
<u>8 5/8"</u>	<u>507</u>	<u>385 SKS</u>		
<u>5 1/2"</u>	<u>5840</u>	<u>500 SKS</u>		

DRILLED BY CABLE TOOL \_\_\_\_\_  
PRODUCTIVE RESERVOIR \_\_\_\_\_  
INITIAL PRODUCTION \_\_\_\_\_

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
Morrison	Surface			
Chinle	1,667'			
De Chelly	2,712'			
Cutler				
(Undivided)	2,968'			
Upper Hermosa	4,423'			
Upper Ismay	5,145'			
Lower Ismay	5,208'			
Desert Creek	5,286'			
Akah	5,425'			
Barker Creek	5,558'			
Lower Hermosa	5,774' (ie. Pinkerton Trail E)			
T.D.				
Driller	5,840'			
Logger	5,835'			

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG
<u>laterolog, sonic</u>	<u>5653-57 &amp; 5730-34</u>		SAMPLE DESCRP. _____
<u>Comp. Form. Density</u>	<u>5307-12, 5252-64</u>		SAMPLE NO. <u>1799B</u>
	<u>5166-72</u>		CORE ANALYSIS _____
			DSTs _____

REMARKS \_\_\_\_\_  
APP. TO PLUG \_\_\_\_\_  
PLUGGING REP. \_\_\_\_\_  
COMP. REPORT ☒

WATER WELL ACCEPTED BY \_\_\_\_\_

BOND CO. Seaboard Surety Co. filed in P/N 689 BOND NO. 73-14-51  
BOND AMT. \$ 25,000 CANCELLED 10-9-90 DATE 9-18-70  
FILING RECEIPT 1004 LOC. PLAT X WELL BOOK X PLAT BOOK X  
API NO. 02=001- 20236 DATE ISSUED 11-14-77 DEDICATION W/2 of NE/4

PERMIT NUMBER 687

(over)

NO.	FROM	TO	RESULTS
1	5240	5299	Rec. 54' See Core Any.
2	5300	5360	Rec. 56'

REMEDIAL HISTORY			
DATE STARTED - COMPLETED		WORK PERFORMED	NEW PERFORATIONS

ADDITIONAL ENCLOSURES

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG																	
DESIGNATE TYPE OF COMPLETION:																	
New Well	<input checked="" type="checkbox"/>	Work-Over	<input type="checkbox"/>	Deepen	<input type="checkbox"/>	Plug Back	<input type="checkbox"/>	Same Reservoir	<input type="checkbox"/>	Different Reservoir	<input type="checkbox"/>	Oil	<input type="checkbox"/>	Gas	<input type="checkbox"/>	Dry	<input checked="" type="checkbox"/>
DESCRIPTION OF WELL AND LEASE																	
Operator Energy Reserves Group, Inc.										Address P.O. Box 3280, Casper, Wyoming 82602							
Federal, State or Indian Lease Number or name of lessor if fee lease 14-20-603-716										Well Number 9		Field & Reservoir Teec Nos Pos - Ismay					
Location 2,310' FNL & 1,650' FEL (SW NE)										County Apache							
Sec. TWP-Range or Block & Survey Sec. 26-T41N-R30E										<i>See plugging record dated 11-5-81</i>							
Date spudded 11-21-77		Date total depth reached 12-04-77		Date completed, ready to produce 1-20-78 T.A.		Elevation (DF, RKB, RT or Gr.) 5,244' KB		Elevation of casing hd. range feet									
Total depth 5,840'		P.B.T.D. 5,490'		Single, dual or triple completion? N.A.		If this is a dual or triple completion, furnish separate report for each completion.											
Producing interval (s) for this completion Dry Hole										Rotary tools used (interval) 0'-T.D.				Cable tools used (interval) N.A.			
Was this well directionally drilled? No				Was directional survey made? No				Was copy of directional survey filed? No				Date filed					
Type of electrical or other logs run (check logs filed with the commission) Dual laterolog; CNL-FDC; BHC Sonic (all filed)										Date filed							
CASING RECORD																	
Casing (report all strings set in well-conductor, surface, intermediate, producing, etc.)																	
Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled											
Surface	12-1/4"	8-5/8"	24#	520' KB	385	-0-											
Production	7-7/8"	5-1/2"	14#	5,840' KB	500	-0-											
TUBING RECORD																	
Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)										
N.A. in.	ft.	ft.	in.	N.A. ft.	ft.												
PERFORATION RECORD																	
Number per ft.	Size & type	Depth Interval	CMT.														
2	4" DPJ	5,653'-57'	5,730'-34'														
2	4" DPJ	5,307'-12'															
2	4" Omega	5,252'-64'															
2	4" Omega	5,166'-72'															
ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD																	
Am't. & kind of material used		Depth Interval															
Acid frac w/500 gals 28%		5,307'-12'															
Acid frac w/3500 gals 28%		5,166'-72'															
Cmt on back of sheet																	
INITIAL PRODUCTION																	
Date of first production T.A.		Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump):															
Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity											
			bbls.	MCF	bbls.	° API (Corr)											
Tubing pressure	Casing pressure	Cal'd rate of Production per 24 hrs.	Oil	Gas	Water	Gas-oil ratio											
			bbls.	MCF	bbls.												
Disposition of gas (state whether vented, used for fuel or sold):																	
<p>CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the <u>District Production Engineer</u> of the <u>Energy Reserves Group, Inc.</u> (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.</p> <p style="text-align: center;">Date <u>JANUARY 23, 1978</u> Signature <u>Dean B. Barner</u></p>																	
RECEIVED																	
<p style="text-align: center;">JAN 27 1978 O &amp; G CONS. COMM.</p>																	
Permit No. 687										<p style="text-align: center;">STATE OF ARIZONA OIL &amp; GAS CONSERVATION COMMISSION Well Completion or Recompletion Report and Well Log File One Copy Form No. 4</p>							

# DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description
Morrison	Surface		Core #1 - 5,240'-99' Rec. 54'
Chinle	1,667'		Core #2 - 5,300'-60' Rec. 56'
De Chelly	2,712'		
Cutler			Barker Creek Perfs 5,653'-57'; 5,730'-34'
(Undivided)	2,968'		Spotted 30 sx "B" w/2% CaCl <sub>2</sub> across perfs.
Upper Hermosa	4,423'		
Upper Ismay	5,145'		
Lower Ismay	5,208'		
Desert Creek	5,286'		
Akah	5,425'		
Barker Creek	5,558'		
Lower Hermosa	5,774'		
T.D.			
Driller	5,840'		
Logger	5,835'		

i.e. Pinkerton Trail

Show all important notes of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

## INSTRUCTIONS:

Attach all logs or other acceptable log of well.

The all Completion or Recombination report and well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than thirty days after project completion.

Form No. 4

SUNDY NOTICES AND REPORTS ON WELLS

RECEIVED

MAY 6 1985

O & G CONS. COMM.

1. Name of Operator Energy Reserves Group, Inc.  
 2. OIL WELL ☐ GAS WELL ☐ OTHER ☐ (Specify) DRY  
 3. Well Name Navajo Tribal "O" NO. 9  
 Location 2310' ENL & 1650' FEL  
 Sec. 26 Twp. 41N Rge. 30E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease Navajo Tribal "O" 14-20-603-716  
 5. Field or Pool Name Teec Nos Pos-Ismay

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>		ABANDONMENT <input checked="" type="checkbox"/>
(OTHER) <input type="checkbox"/>		(OTHER) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

The subject well was plugged and abandoned as follows:  
 4-23 to 4-24-85: MI RUSU. Installed BOPE. PU csg scraper and TIH to 4920'. Circ hole w/9.2#/gal mud. TOOH. Perf'd 2763', 1440', and 570' w/4 JSPF. PU packer and TIH to 2663'. Set packer. Tried to pump into perfs @ 2763' but could not. Release packer and TIH to 2810'. Mixed and spotted a 15 sx Class "B" cement plug from 2810' to 2681'. PU packer to 1340' and set. Mixed and pumped 45 sx Class "B" cement below packer. Release packer and PU to 470'. Set packer. Mixed and pumped 45 sx Class "B" cement below packer. Released packer and TOOH. Layed down packer and TIH to 50'. Mixed and pumped 6 sx Class "B" Cement. TOOH. ND BOPE. RD MOSU.

4-26-85: Cut off wellhead and installed dry hole marker.

8. I hereby certify that the foregoing is true and correct.

Signed Paul Bertoglio Title Petroleum Engineer Date 5-2-85  
 Paul Bertoglio

Permit No. 687

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 Sundry Notices and Reports On Wells  
 File Two Copies  
 Form No. 25

## SUNDRY NOTICES AND REPORTS ON WELLS

RECEIVED

APR 15 1985

O &amp; G CONS. COMM.

1. Name of Operator Energy Reserves Group, Inc.
2. OIL WELL ☐ GAS WELL ☐ OTHER ☐ (Specify) Dry Hole
3. Well Name Navajo "O" No. 9
- Location 2310' ENL & 1650' FEL
- Sec. 26 Twp. 41N Rge. 30E County Apache Arizona.
4. Federal, State or Indian Lease Number, or lessor's name if fee lease 14-20-603-716
5. Field or Pool Name Teec Nos Pos-Ismay
6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	<input type="checkbox"/>	FULL OR ALTER CASING	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	DIRECTIONAL DRILL	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	PERFORATE CASING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>
(OTHER) <u>Plug and Abandon</u>	<input type="checkbox"/>		

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF	<input type="checkbox"/>	MONTHLY PROGRESS	<input type="checkbox"/>
FRACTURE TREATMENT	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
SHOOTING OR ACIDIZING	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
(OTHER)	<input type="checkbox"/>	ABANDONMENT	<input type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

## 7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Energy Reserves Group, Inc. is proposing to plug and abandon the subject well as follows:

1. MI RUSU. Install BOPE. PU casing scraper and tuing. TIH to 4920'. Circulate hole w/ 9.2#/gal mud. TOOH.
2. Perforate @ 1440' w/4 JS (50' below Wingate Formation Top) and @ 570' w/4 JS (50' below surface casing shoe).
3. PU packer and TIH to 1340'. Set packer. Mix and pump 45 sx Class "B" cement below packer displacing with 9.2#/gal mud.
4. Release packer and PU to 470'. Reset packer. Mix and pump 45 sx Class "B" cement below packer displacing with 9.2#/gal mud.
5. Release packer and TOOH. TIH w/tubing to 50'. Mix and pump 6 sx Class "B" cement. TOOH. Top off well as necessary w/Class "B" cement.
6. ND BOP. RD MOSU. Cut off wellhead and install dry hole marker.

It is anticipated this work will be performed during the week of 4-22-85 to 4-27-85.

This procedure was discussed and approved by Mr. Rudy Ybarra with the Arizona Oil and Gas Commission on 4-10-85.

This well was plugged back above all potential producing zones in October 1981 because the upper most potential zone, the Upper Ismay, still turned out to be uncommercial after an acid frac.

## 8. I hereby certify that the foregoing is true and correct.

Signed

Paul Bertoglio  
Paul Bertoglio

Title

Petroleum Engineer

Date

4-10-85

Permit No.

687STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

Sundry Notices and Reports On Wells

File Two Copies

Form No. 25

9-331  
1973

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☒ gas ☐ other ☐  
well well well

2. NAME OF OPERATOR  
Energy Reserves Group, Inc.

3. ADDRESS OF OPERATOR  
P. O. Box 3280, Casper, WY 82602

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 2,310' FNL & 1,650' FEL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:  
TEST WATER SHUT-OFF ☐ ☐  
FRACTURE TREAT ☐ ☐  
SHOOT OR ACIDIZE ☐ ☐  
REPAIR WELL ☐ ☐  
PULL OR ALTER CASING ☐ ☐  
MULTIPLE COMPLETE ☐ ☐  
CHANGE ZONES ☐ ☐  
ABANDON\* ☐ ☐  
(other) Subsequent - T.A.

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

The Desert Creek perms (5,307'-5,312') and Lower Ismay perms (5,252'-5,264') were squeezed with 40 sx. of Class "B" cement below the cement retainer set at 5,225'. A 60 sx. plug was placed across the Upper Ismay perms (5,166'-5,172') on top of the cement retainer. The cement top was tagged at 4,920' with a sinker bar on a wireline.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_

18. I hereby certify that the foregoing is true and correct

SIGNED Paul Bertoglio TITLE Prod. Engr.-RMD DATE November 5, 1981  
Paul Bertoglio

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

Form Approved  
Budget Bureau No. 42-R1424

5. LEASE  
14-20-603-2160  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Navajo  
7. UNIT AGREEMENT NAME  
RECEIVED  
8. FARM OR LEASE NAME  
Navajo "0"  
9. WELL NO.  
9  
10. FIELD OR WILDCAT NAME  
Teec Nos Pos  
11. SEC., T., R., M. OR BLK. AND SURVEY OR  
AREA  
Sec. 26-T41N-R30E  
12. COUNTY OR PARISH  
Apache  
13. STATE  
Arizona  
14. API NO.  
15. ELEVATIONS (SHOW DEPTH AND WD)  
G.L.-5,231' (K.B.-5,244')

(NOTE: Report results of multiple completion or zone change on Form 9-330.)



9-331  
1973

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☒ well gas ☐ well other ☐

2. NAME OF OPERATOR  
Energy Reserves Group, Inc.

3. ADDRESS OF OPERATOR  
P. O. Box 3280, Casper, Wyoming 82602

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 2,310' FNL & 1,650' FEL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐  
FRACTURE TREAT ☐  
SHOOT OR ACIDIZE ☐  
REPAIR WELL ☐  
PULL OR ALTER CASING ☐  
MULTIPLE COMPLETE ☐  
CHANGE ZONES ☐  
ABANDON\* ☐  
(other) ☐ Temporarily Abandon

SUBSEQUENT REPORT OF:

RECEIVED  
OCT 20 1981  
U. S. GEOLOGICAL SURVEY  
FARMINGTON, N. M.

5. LEASE  
14-20-603-716  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Navajo  
7. UNIT AGREEMENT NAME  
8. FARM OR LEASE NAME  
Navajo "O"  
9. WELL NO.  
9  
10. FIELD OR WILDCAT NAME  
Teec Nos Pos  
11. SEC., T., R., M. OR BLK. AND SURVEY OR AREA  
Sec. 26-T4 IN R30E  
12. COUNTY OR PARISH  
Apache  
13. STATE  
Arizona  
14. API NO.  
15. ELEVATIONS (SHOW DF, KDB, AND WD)  
G.L. 5,231' (K.B. - G.L. 5413')

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Energy Reserves Group, Inc. proposes to plug the following perforations in the subject well: Desert Creek - 5,307'-5,312', Lower Ismay - 5,252'-5,264', and the Upper Ismay - 5,166'-5,172'. The Desert Creek and Lower Ismay perfs will be squeezed below a cement retainer set at 5,225' and a plug across the Upper Ismay perfs will be set on top of it to a depth of at least 5,095' (50' above the Upper Ismay Formation top).

Verbal approval for this work was received from Richard Bell with the U.S.G.S. on 10-21-81.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Paul Bertoglio TITLE Prod. Eng.-RMD DATE October 21, 1981  
Paul Bertoglio

(This space for Federal or State office use)  
APPROVED BY Anthony D. S. Sup. TITLE Anthony D. S. Sup. DATE NOV 22 1981  
CONDITIONS OF APPROVAL, IF ANY:

10/20

Energy Reserve Group  
Verbal Approval to plug  
well #9 Nav-O  
Teec Nos Pos field *AK*

P/N 687

SUNDY NOTICES AND REPORTS ON WELLS

RECEIVED

NOV 10 1981

1. Name of Operator Energy Reserves Group, Inc.  
 2. OIL WELL ☒ GAS WELL ☐ OTHER ☐ (Specify) \_\_\_\_\_  
 3. Well Name Navaajo "O" No. 9  
 Location 2,310' FNL & 1,650' FEL  
 Sec. 26 Twp. 41N Rge. 30E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease 14-20-603-716

5. Field or Pool Name Tec Nos Pos Field

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>		ABANDONMENT <input type="checkbox"/>
(OTHER) <u>Temporarily Abandon</u> <input type="checkbox"/>		(OTHER) _____ <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Energy Reserves Group, Inc. proposes to plug the following perforations in the subject well: Desert Creek - 5,307'-5,312', Lower Ismay - 5,252'-5,264', and the Upper Ismay - 5,166'-5,172'. The Desert Creek and Lower Ismay perms will be squeezed below a cement retainer set at 5,225' and a plug across the Upper Ismay perms will be set on top of it to a depth of at least 5,095' (50' above the Upper Ismay Formation top) for this work.

Verbal approval was received from A.K. Dass with Arizona Oil and Gas Conservation Commission on 10-20-81.

8. I hereby certify that the foregoing is true and correct.

Signed Paul Bertoglio Title Prod. Engr. - RMD Date October 21, 1981  
 Paul Bertoglio

Permit No. 687

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 Sundry Notices and Reports On Wells  
 File Two Copies

Form No. 25

**SUNDRY NOTICES AND REPORTS ON WELLS**

1. Name of Operator Energy Reserves Group, Inc.

2. OIL WELL ☒ GAS WELL ☐ OTHER ☐ (Specify) \_\_\_\_\_

3. Well Name Navajo "O" #9

Location 2,310' FNL & 1,650' FEL (SW NE $\frac{1}{4}$ )

Sec. 20 Twp. 41N Rge. 30E County Apache Arizona.

4. Federal, State or Indian Lease Number, or lessor's name if fee lease Navajo 14-20-603-716

5. Field or Pool Name Teec Nos Pos - Ismay

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>		ABANDONMENT <input type="checkbox"/>
(OTHER) <u>T.A. Desert Creek Zone</u> <input checked="" type="checkbox"/>		(OTHER) _____ <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Upper Ismay Perfs - 5,166'-5,172'  
 Lower Ismay Perfs - 5,252'-5,264'  
 Desert Creek Perfs - 5,307'-5,312'

Individual testing of the above zones produced little to no oil. In an effort to obtain data to aid in evaluating possible courses of action to take, it is desired to obtain valid BHP data of the Lower Ismay zone. Testing has verified no communication between the zones. It is proposed to set a cement retainer at 5,290', between the Lower Ismay and Desert Creek perfs. This will temporarily isolate the Lower Ismay and Desert Creek perfs in the casing. If further evaluation indicates that the Desert Creek zone is to be permanently abandoned, we will sting into the retainer and pump cement below it. An Intention to Abandon this zone will be submitted at that time.

Your approval of setting the cement retainer between the Lower Ismay and Desert Creek perfs is solicited.

RECEIVED

APR 26 1978

O & G CONS. COMM.

8. I hereby certify that the foregoing is true and correct.

Signed Hean B. Warner Title Dist. Prod. Engr. Date 4-24-78

Permit No. 687

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 Sundry Notices and Reports On Wells  
 File Two Copies  
 Form No. 25

# SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator Energy Reserves Group, Inc.  
 2. OIL WELL ☒ GAS WELL ☐ OTHER ☐ (Specify) \_\_\_\_\_  
 3. Well Name Navajo "O" #9  
 Location 2,310' FNL & 1,650' FEL (SW NE 1/4)  
 Sec. 20 Twp. 41N Rge. 30E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease Navajo 14-20-603-716

5. Field or Pool Name Teec Nos Pos - Ismay

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>		ABANDONMENT <input type="checkbox"/>
(OTHER) <u>Temporarily Abandon</u>	<input checked="" type="checkbox"/>	(OTHER) _____	<input type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Completion attempts resulted in very low oil producing rates and well appears to be uneconomical at the present time.

We are evaluating various courses of action to determine if this well can be completed as an economical oil producer.

We solicit your approval to retain this well in a Temporarily Abandoned status pending the outcome of this evaluation.

RECEIVED

MAR 22 1978

O & G CONS. COMM.

8. I hereby certify that the foregoing is true and correct.

Signed James B. Barner

Title Dist. Prod. Engr. Date 3-10-78

Permit No. 687

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 Sundry Notices and Reports On Wells  
 File Two Copies  
 Form No. 25

# SUNDY NOTICES AND REPORTS ON WELLS

1. Name of Operator Energy Reserves Group, Inc.  
 2. OIL WELL ☒ GAS WELL ☐ OTHER ☐ (Specify) \_\_\_\_\_  
 3. Well Name Navajo "O" #9  
 Location 2,310' FNL & 1,650' FEL (SW NE 1/4)  
 Sec 20 Twp 41N Rge 30E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease 14-20-603-716 Navajo

5. Field or Pool Name Teec Nos Pos - Ismay

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(OTHER) <u>Progress</u>	ABANDONMENT <input checked="" type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

12-29-77 Make short trip to 1,567'. Rec. B.P. Reran Baker Mod. "B" Lok Set B.P. w/Amerada press bomb w/72 hr. clock. Set B.P. at 5,287' KBM.

12-30-77 Rig up McCullough. Perfed Lower Ismay 5,252'-64' w/2 JSPF Omega Jets. TIH w/Baker EA retrievamatic w/9' tail pipe. Pkr at 5,240'.

12-31-77 Ran GR log. Log showed strong radioactivity across perfs 5,252'-64'. Testing. Acidized w/14-1/3 bbls, 28% NE HCL.

01-01-78 Testing.

01-02-78 S.D. for New Year.

01-03-78 S.D. for New Year.

01-04-78 Testing.

01-05-78 Press recorder below RBP showed no communications between the Desert Creek and the Lower Ismay. TIH w/press recorder. Installed below RBP to 3,000'±.

01-06-78 Prepare to perf Upper Ismay 5,166'-72' w/2 JSPF. No signs of gas or oil after perf.

8. I hereby certify that the foregoing is true and correct.

Signed

*Terry J. Cox*

Title Production Engr.

Date 01-06-78

Permit No. 687

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 Sundry Notices and Reports On Wells  
 File Two Copies

Form No. 25

# SUNDY NOTICES AND REPORTS ON WELLS

1. Name of Operator Energy Reserves Group, Inc.  
 2. OIL WELL ☒ GAS WELL ☐ OTHER ☐ (Specify) \_\_\_\_\_  
 3. Well Name Navajo "O" #9  
 Location 2,310' FNL & 1,650' FEL (SW NE 1/4)  
 Sec 20 Twp 41N Rge 30E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease Navajo 14-20-603-716  
 5. Field or Pool Name Teec Nos Pos - Ismay

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:			SUBSEQUENT REPORT OF:		
TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	DIRECTIONAL DRILL	<input type="checkbox"/>	FRACTURE TREATMENT	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	PERFORATE CASING	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>	MONTHLY PROGRESS	<input type="checkbox"/>
(OTHER)	<input type="checkbox"/>		<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
			<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
			<input type="checkbox"/>	ABANDONMENT	<input type="checkbox"/>
			<input type="checkbox"/>	Progress	<input checked="" type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

12-20-77 Trip in w/pkr set at 5,614'. Acidized Barker Creek w/9-1/2 bbls., 28% HCL. TP 4,000 psi, ISIP 3,500 psi.  
 12-21-77 Testing.  
 12-22-77 Squeezed Barker Creek w/30 sx cement + 2% CaCl.  
 12-23-77 Perfed Desert Creek 5,307'-12' w/2 JSPF.  
 12-24-77 Ran pkr set at 5,498'. Acidized perfs w/6 bbls., 28% HCL w/tracer material. TP 3,300 psi, ISIP 3,300 psi. Tracer log showed no communication.  
 12-25-77 S/D for Holidays.  
 12-26-77 S/D for Holidays.  
 12-27-77 S/D for Holidays.  
 12-28-77 Testing.

RECEIVED

DEC 30 1977

O & G CONS. COMM.

8. I hereby certify that the foregoing is true and correct.

Signed Terry J. Cox Title Production Engr. Date 12-28-77

Permit No. 687

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 Sundry Notices and Reports On Wells  
 File Two Copies  
 Form No. 28

# SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator Energy Reserves Group, Inc.  
 2. Oil Well ☒ GAS WELL ☐ OTHER ☐ (Specify) \_\_\_\_\_  
 3. Well Name Navajo "O" #9  
 Location 2,310' FNL & 1,650' FEL (SW NE 1/4)  
 Sec. 26 Twp. 41N Rge. 30E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease Navajo 14-20-603-716  
 5. Field or Pool Name Teec Nos Pos - Ismay

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>		ABANDONMENT <input type="checkbox"/>
(OTHER) <u>Plug Back</u> <input checked="" type="checkbox"/>		(OTHER) _____ <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

12-18-77 Perf Barker Creek formation 5,653'-57' & 5,730'-34' w/2 JPF.  
 12-20-77 Acidized perfs w/250 gals 28% NE acid. Pressure tbg under pkr to 4,000 psi. Inj. rate 0.2 BPM.  
 12-21-77 Swab well dry. Rec. 4.19 BW. Set pkr between perfs. Establish circulation from bottom perfs behind pipe to upper perfs and annulus.  
 Received verbal permission 12-21-77 from Bill Allen, State of Arizona, to plug off Barker Creek Zone as follows:  
 Run tubing open ended to PBTD (5,800'+). Mix and pump 30 sx cement through tubing. TOH with tubing. Cement top inside 5-1/2" casing should be 5,550'+.

RECEIVED

DEC 23 1977

O & G CONS. COMM.

8. I hereby certify that the foregoing is true and correct.

Signed Alvan B. Barner Title Dist. Prod. Engr. Date 12-22-77

Permit No. 687

STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Sundry Notices and Reports On Wells File Two Copies Form No. 25
--



**SUNDY NOTICES AND REPORTS ON WELLS**

1. Name of Operator Energy Reserves Group, Inc.  
 2. OIL WELL ☒ GAS WELL ☐ OTHER ☐ (Specify) \_\_\_\_\_  
 3. Well Name Navajo "O" #9  
 Location 2,310' ENL. & 1,650' FEL (SW NE 1/4)  
 Sec. 20 Twp. 41N Rge. 30E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease Navajo 14-20-603-716  
 5. Field or Pool Name Teec Nos Pos - Tsmay  
 6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SURSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(OTHER) <u>Progress</u>	ABANDONMENT <input checked="" type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

12-16-77 Rig up completion unit.  
 12-17-77 Ran tubing. Swab fluid to 4,700'.  
 12-18-77 Perfed Barker Creek 5,653'-57', 5,730'-34' w/2 JSPF w/4" casing gun.

**RECEIVED**

DEC 21 1977

O & G CONS. COMM.

8. I hereby certify that the foregoing is true and correct.

Signed Terry J. Cox Title Production Engr. Date 12-19-77

Permit No. 687

STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Sundry Notices and Reports On Wells File Two Copies Form No. 28
--

# SUNDRY NOTICES AND REPORTS ON WELLS

1. Name of Operator Energy Reserves Group, Inc.  
 2. Oil Well ☒ GAS WELL ☐ OTHER ☐ (Specify) \_\_\_\_\_  
 3. Well Name Navajo "O" #9  
 Location 2,310' FNL & 1,650' FEL SW NE  
 Sec. 26 Twp. 41N Rge. 30E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease 14-20-603-716

5. Field or Pool Name Teec Nos Pos

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(OTHER) <u>Progress</u>	ABANDONMENT <input checked="" type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

12-14-77 W.O.C.T.

Completion rig expected to move on 12-15-77.

RECEIVED

DEC 19 1977

O & G CONS. COMM.

8. I hereby certify that the foregoing is true and correct:

Signed W. B. Barnes Title Dist. Prod. Engr. Date 12-14-77

Permit No. 687

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 Sundry Notices and Reports On Wells  
 File Two Copies  
 Form No. 25

Form 9-331  
(May 1963)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-716

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo "O"

9. WELL NO.

9

10. FIELD AND POOL, OR WILDCAT

Teec Nos Pos - Ismay

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA

Sec. 20-T41N-R30E

12. COUNTY OR PARISH 13. STATE

Apache

Arizona

SUNDRY NOTICES AND REPORTS ON WELLS  
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL ☒ GAS ☐ OTHER ☐  
WELL WELL

2. NAME OF OPERATOR

Energy Reserves Group, Inc.

3. ADDRESS OF OPERATOR

P.O. Box 3280, Casper, Wyoming 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)

At surface

2,310' FNL & 1,650' FEL (SW NE $\frac{1}{4}$ )

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

G.L. Elev. 5,231'; K.B. 5,244'

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

FULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

Well History

(NOTE: Report results of multiple completion on Well  
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any  
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones perti-  
nent to this work.)\*

The above described well was drilled to a T.D. of 5,840' w/7-7/8" bit. Cut Core #1  
5,240'-5,299' in Lower Ismay & Core #2 5,300'-5,360' in Desert Creek. Ran Logs.

Ran 179 its 5,833' (net), 5-1/2" O.D., 14#, K-55, 8Rth, SS, ST&C, R-3, new casing  
set at 5,840' (K.B.). Cemented w/500 sx of 50-50 pozmix and cement w/2% gel &  
10% salt. Plug down at 10:55 p.m., 12-05-77. Good returns throughout job.

RECEIVED

DEC 12 1977

O & G CONS. COMM.

18. I hereby certify that the foregoing is true and correct

SIGNED

*Ramon C. Hillman*

TITLE Drilling Superintendent

DATE 12-06-77

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

687

\*See Instructions on Reverse Side

RECEIVED

MAR 6 1978

O & G CONS. COMM.

CORE ANALYSIS RESULTS FOR  
ENERGY RESERVES GROUP, INC.

NAVAJO "O" NO. 9

TEEC NOS POS FIELD

APACHE COUNTY, ARIZONA

687

CL-5112

**CORE LABORATORIES, INC.**  
Petroleum Reservoir Engineering  
DALLAS, TEXAS

Company ENERGY RESERVES GROUP INC. Formation LOWER ISMAY, DESERT CK. Page 1 of 3  
Well NAVAJO "O" NO. 9 Cores DIA CONV File RP-3-2835  
Field TEEC NOS POS Drilling Fluid W.B.M. Date Report NOV. 30, 1977  
County APACHE State ARIZONA Elevation 5244 KB Analysts TRUITT  
Location SE NE SEC 26 T41N R30E Remarks \_\_\_\_\_

**CORE ANALYSIS RESULTS**

(Figures in parentheses refer to footnote remarks)

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs		POROSITY PERCENT	RESIDUAL SATURATION		TOTAL WATER % PORE	PROBABLE PRODUCTION	REMARKS
		MAX	90 DEG		OIL % VOLUME	% PORE			
1	5236-37	0.01	0.01	1.1	0.0	16.1	LM, gy dns tr scat p-p vugg styl		
2	5237-38	0.01	0.01	2.8	0.0	35.6	LM, gy dns tr scat p-p vugg		
3	5238-39	0.01	0.01	1.6	0.0	24.7	LM, gy dns tr scat p-p vugg styl		
4	5239-40	0.04	0.04	2.7	3.4	27.6	LM, gy dns p-p vugg		
5	5240-41	0.15	0.09	3.1	2.9	36.4	LM, gy dns p-p vugg		
6	5241-42	0.05	0.01	1.9	4.7	37.8	LM, gy dns p-p vugg vf		
7	5242-43	0.46	0.10	3.1	3.3	25.6	LM, gy dns-xln p-p vugg		
8	5243-44	0.06	0.02	3.1	3.2	25.7	LM, gy dns-xln p-p vugg		
9	5244-45	0.22	*	3.1	3.6	34.5	LM, gy dns-xln p-p vugg vf		
10	5245-46	0.10	*	3.2	2.8	42.6	LM, gy dns-xln p-p vugg vf		
11	5246-47	0.25	0.02	4.2	9.7	33.8	LM, gy dns-xln p-p vugg		
12	5247-48	0.52	0.07	2.7	12.1	36.5	LM, gy dns-xln p-p vugg		
13	5248-49	0.32	0.22	3.9	14.2	28.7	LM, gy dns-xln abd p-p vugg algal por		
14	5249-50	6.8	0.23	3.8	8.6	45.7	LM, gy dns-xln abd p-p vugg algal por		
15	5250-51	1.7	0.90	4.5	9.6	39.5	LM, gy xln abd p-p vugg algal por		
16	5251-52	1.3	1.3	5.1	11.0	33.3	LM, gy xln abd p-p vugg algal por		
17	5252-53	1.7	1.6	5.8	10.3	31.1	LM, gy xln abd p-p vugg algal por		
18	5253-54	3.7	1.8	5.9	9.4	34.4	LM, gy xln abd p-p vugg algal por		
19	5254-55	5.8	5.8	7.1	8.3	36.1	LM, gy xln abd p-p vugg algal por		
20	5255-56	4.4	3.3	4.5	7.8	46.1	LM, gy xln abd p-p vugg algal por		
21	5256-57	18.	16.	7.6	7.6	41.1	LM, gy xln abd p-p vugg algal por		
22	5257-58	9.3	8.9	6.4	5.0	37.4	LM, gy xln abd p-p vuggs algal por		
23	5258-59	6.4	4.0	6.3	1.8	37.8	LM, gy xln abd p-p vuggs algal por		
24	5259-60	7.7	5.7	8.8	3.5	43.1	LM, gy dns-xln abd p-p vuggs algal por		
25	5260-61	5.3	4.7	7.9	4.9	17.6	LM, gy xln-suc abd p-p vuggs algal por		
26	5261-62	2.4	2.1	5.8	6.1	18.1	LM, gy xln-suc abd p-p vuggs algal por		
27	5262-63	0.03	0.01	3.5	8.5	25.3	LM, gy xln-suc p-p vuggs styl		
28	5263-64	0.08	0.05	3.5	3.2	25.8	LM, gy xln-suc p-p vuggs		
29	5264-65	0.01	*	1.3	0.0	39.5	LM, gy dns vf		
30	5265-66	0.01	0.01	1.5	0.0	37.5	LM, gy dns		
31	5266-67	0.01	0.01	0.7	0.0	50.0	LM, gy dns		
32	5267-68	0.01	*	1.5	0.0	50.0	LM, gy dns vf		
33	5268-69	0.01	0.01	0.9	0.0	50.0	LM, gy dns		
34	5269-70	0.01	*	1.0	0.0	59.6	LM, dk-gy dns		
35	5270-71	0.01	0.01	0.7	0.0	50.0	LM, dk-gy dns		
36	5271-72	1.0	0.01	1.2	0.0	40.1	LM, dk-gy dns vf		
	5272-5284						Shale--no analysis		Desert creek form.
37	5284-85	0.05	0.05	1.0	0.0	59.8	LM, gy dns frac		
38	5285-86	0.06	0.01	2.0	0.0	77.8	LM, dk-gy xln		
39	5286-87	0.09	0.05	1.4	0.0	57.0	LM, gy xln styl		

## NOTE:

(\*) REFER TO ATTACHED LETTER.

(1) INCOMPLETE CORE RECOVERY--INTERPRETATION RESERVED.

(2) OFF LOCATION ANALYSES--NO INTERPRETATION OF RESULTS.

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc., and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CL-5112

**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*  
 DALLAS, TEXAS

Company ENERGY RESERVES GROUP INC. Formation DESERT CREEK Page 2 of 3  
 Well NAVAJO "O" NO. 9 Cores DIA CONV File RP-3-2835  
 Field TEEC NOS POS Drilling Fluid W.B.M. Date Report NOV. 30, 1977  
 County APACHE State ARIZONA Elevation 5244 KB Analysts TRUITT  
 Location SE NE SEC 26 T41N R30E Remarks \_\_\_\_\_

**CORE ANALYSIS RESULTS**

*(Figures in parentheses refer to footnote remarks)*

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs		POROSITY PERCENT	RESIDUAL SATURATION		PROBABLE PRODUCTION	REMARKS
		MAX	90 DEG		OIL % VOLUME	TOTAL WATER % PORE		
40	5287-88	0.01	*	2.1	1.9	54.5	LM, gy xln vf	
41	5288-89	0.04	*	3.2	2.2	54.3	LM, gy xln-suc tr p-p vugg vf	
42	5289-90	0.05	*	3.2	1.6	49.2	LM, gy xln vf	
	5290-96						Lost recovery	
	5296-5300						Drilg. depth corr..	
43	5300-01	0.01	0.01	0.7	0.0	66.7	LM, gy dns	
44	5301-02	0.01	0.01	0.6	0.0	66.7	LM, gy dns	
45	5302-03	0.01	0.01	0.6	0.0	66.7	LM, gy dns	
46	5303-04	0.10	0.09	1.0	0.0	75.0	LM, gy dns sh-ptg	
47	5304-05	0.01	*	0.9	0.0	60.0	LM, gy dns styl	
48	5305-06	0.07	0.01	1.1	0.0	80.0	LM, gy dns vf	
49	5306-07	0.04	0.01	4.4	0.0	73.9	LM, gy suc abd mcr vugg vf	
50	5307-08	0.13	0.11	1.2	0.0	80.0	LM, gy dns	
51	5308-09	0.11	0.09	0.7	0.0	66.7	LM, gy dns	
52	5309-10	0.66	*	7.6	8.8	52.9	LM, gy tr oomoldic por vf	
53	5310-11	0.30	*	12.8	6.0	31.8	LM, gy tr oomoldic por	
54	5311-12	0.16	*	10.5	6.1	28.9	LM, gy tr oomoldic por vf	
55	5312-13	0.11	*	8.4	7.9	18.7	LM, gy tr suc styl vf	
56	5313-14	0.10	*	5.6	8.6	22.8	LM, gy tr xln tr mcr vugg	
57	5314-15	0.06	0.03	5.2	1.7	59.7	LM, gy tr xln tr mcr vugg	
58	5315-16	0.12	0.08	3.4	0.0	64.7	LM, gy dns styl	
59	5316-17	0.04	0.01	3.6	0.0	70.6	LM, gy dns styl	
60	5317-18	0.03	0.01	2.6	0.0	71.4	LM, gy dns styl	
61	5318-19	0.26	0.19	0.8	0.0	75.0	LM, dk-gy dns styl frac	
62	5319-20	0.26	0.14	0.6	0.0	66.7	LM, dk-gy dns frac	
63	5320-21	0.18	0.14	0.7	0.0	75.0	LM, dk-gy dns frac	
64	5321-22	0.22	0.13	1.1	0.0	50.0	LM, dk-gy dns frac	
65	5322-23	0.14	*	0.8	0.0	66.7	LM, dk-gy dns frac	
66	5323-24	0.01	*	0.7	0.0	66.7	LM, dk-gy dns	
67	5324-25	0.40	0.23	0.6	0.0	66.7	LM, dk-gy dns frac	
	5325-5356						Dk-gy lmst--no analysis	
	5356-5360						Lost recovery	

\* Plug type permeability samples

## NOTE:

(\*) REFER TO ATTACHED LETTER.

(1) INCOMPLETE CORE RECOVERY-INTERPRETATION RESERVED.

(2) OFF LOCATION ANALYSES-NO INTERPRETATION OF RESULTS.

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc., and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CL-511-2

**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*  
 DALLAS, TEXAS

Company ENERGY RESERVES GROUP INC. Formation LOWER ISMAY, DESERT CK. Page 3 of 3  
 Well NAVAJO "O" NO. 9 Cores DIA CONV File RP-3-2835  
 Field TEEC NOS POS Drilling Fluid W.B.M. Date Report NOV. 30, 1977  
 County APACHE State ARIZONA Elevation 5244 KB Analysts TRUITT  
 Location SE NE SEC 26 T41N R30E Remarks \_\_\_\_\_

**CORE ANALYSIS RESULTS**  
*(Figures in parentheses refer to footnote remarks)*

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs		GRAIN DNS.	RESIDUAL SATURATION		PROBABLE PRODUCTION	REMARKS
		HORIZONTAL	VERTICAL		OIL % VOLUME % PORE	TOTAL WATER % PORE		
2	5237-38			2.71				
4	5239-40			2.71				
11	5246-47		0.01	2.70				
12	5247-48		0.01	2.71				
13	5248-49		0.25	2.71				
14	5249-50		0.18	2.71				
15	5250-51		0.24	2.73				
16	5251-52		0.32	2.72				
17	5252-53		0.42	2.72				
18	5253-54		1.8	2.72				
19	5254-55		2.5	2.71				
20	5255-56		1.9	2.71				
21	5256-57		8.6	2.71				
22	5257-58		4.6	2.71				
23	5258-59		3.8	2.72				
24	5259-60		7.3	2.72				
25	5260-61		0.57	2.72				
26	5261-62		0.34	2.73				
27	5262-63		0.01	2.73				
29	5264-65			2.74				
32	5267-68			2.71				
52	5309-10		0.45**	2.78				
53	5310-11		0.55**	2.69				
54	5311-12		0.22**	2.73				
55	5312-13		0.16**	2.69				
56	5313-14		0.06**	2.72				

\*\* Plug type permeability samples

## NOTE:

- (\*) REFER TO ATTACHED LETTER.  
 (1) INCOMPLETE CORE RECOVERY—INTERPRETATION RESERVED.

(2) OFF LOCATION ANALYSES—NO INTERPRETATION OF RESULTS.

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc., and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

**CORE LABORATORIES, INC.**



*Petroleum Reservoir Engineering*

COMPANY ENERGY RESERVES GROUP, INC. FIELD TEEC NOS FOS FILE RF-3-2835  
 WELL NAVAJO "O" NO. 9 COUNTY APACHE DATE NOV. 30, 1977  
 LOCATION SE NE SEC 26 T41N R30E STATE ARIZONA ELEV. 5244 KB

## CORE-GAMMA CORRELATION

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. full errors and omissions excepted. but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or land in connection with which such report is used or relied upon.

VERTICAL SCALE: 5" = 100'

### CORE-GAMMA SURFACE LOG (PATENT APPLIED FOR)

GAMMA RAY  
RADIATION INCREASE →

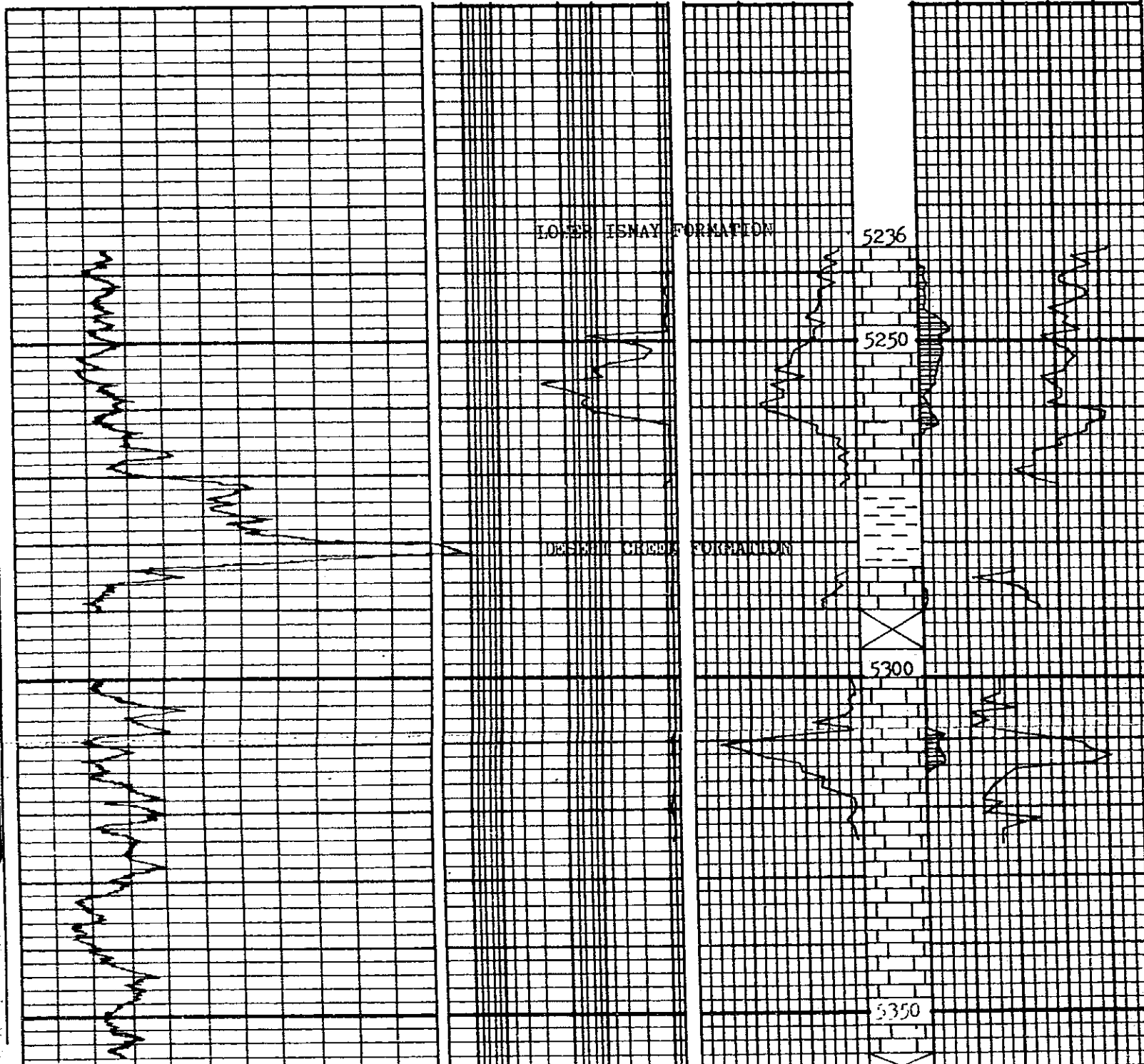
### COREGRAPH

TOTAL WATER ———  
PERCENT TOTAL WATER  
80 60 40 20 0

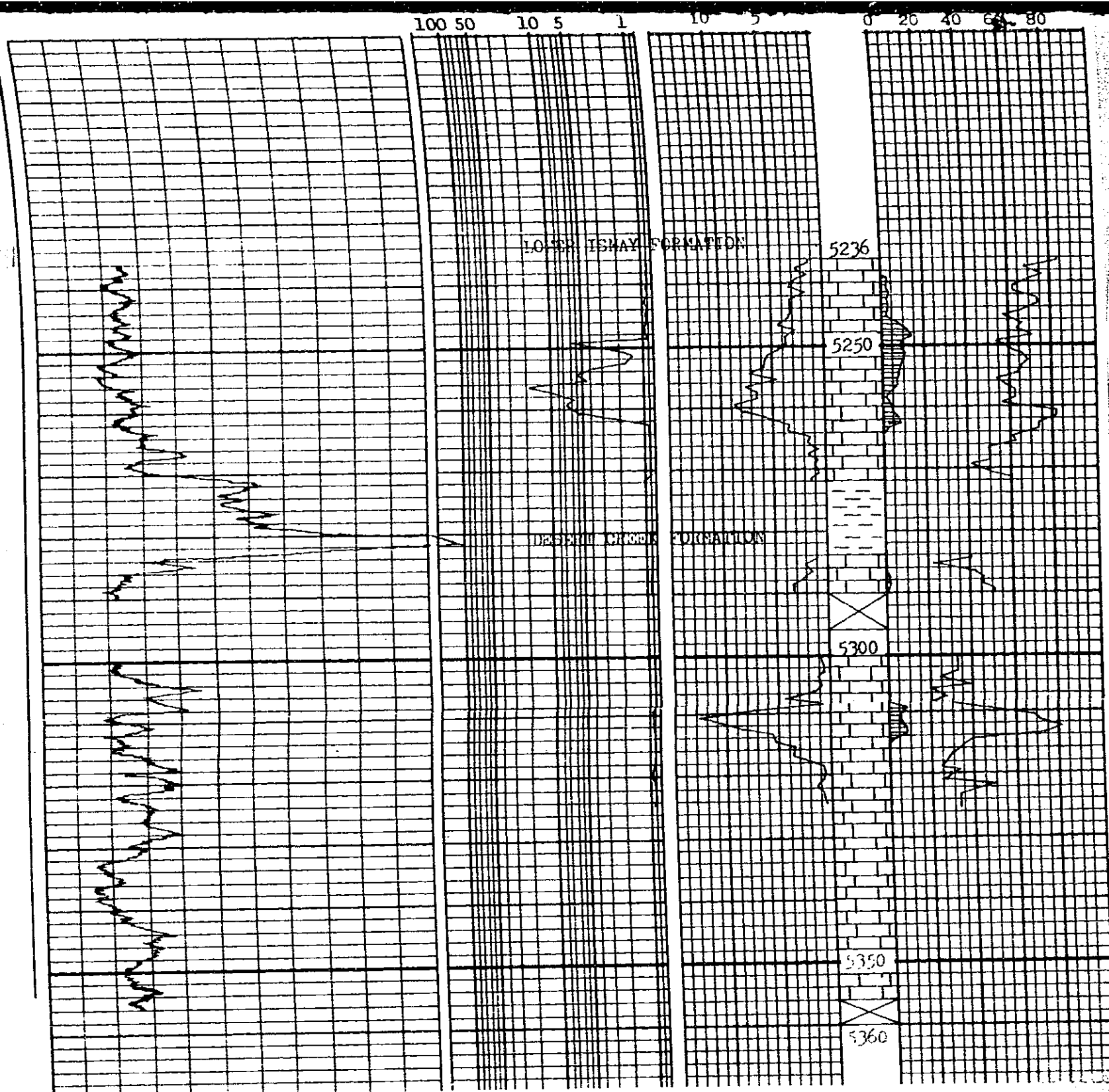
PERMEABILITY ———  
MILLIDARCY  
100 50 10 5 1

POROSITY ———  
PERCENT  
10 5

OIL SATURATION ———  
PERCENT PORE SPACE  
0 20 40 60 80







# CL 529 CORE SUMMARY AND CALCULATED RECOVERABLE OIL

FORMATION NAME AND DEPTH INTERVAL: Lower Ismay - 5249.0-5262.0 Feet

FEET OF CORE RECOVERED FROM ABOVE INTERVAL	13	AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE	35.5
FEET OF CORE INCLUDED IN AVERAGES	13	AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE	30 (e)
AVERAGE PERMEABILITY: MILLIDARCY	5.7	OIL GRAVITY: $\rho_{API}$	40 (e)
PRODUCTIVE CAPACITY: MILLIDARCY-Feet	74.5	ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	
AVERAGE POROSITY: PER CENT	6.1	ORIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED OIL PER BARREL STOCK-TANK OIL	1.30 (e)
AVERAGE RESIDUAL OIL SATURATION: PER CENT OF PORE SPACE	7.2	CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT	255

Calculated maximum solution gas drive recovery is barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is barrels per acre-foot, assuming full maintenance of original reservoir pressure, 100% areal and vertical coverage, and continuation of production to 100% water cut. (Please refer to footnotes for further discussion of recovery estimates.)

(c) Calculated (e) Estimated (m) Measured (\*) Refer to attached letter.

## INTERPRETATION OF DATA

- 5236.0-5249.0 Feet - Non-productive due to low permeability and porosity.
- 5249.0-5262.0 Feet - Oil productive after successful artificial stimulation.
- 5262.0-5272.0 Feet - Non-productive due to low permeability and porosity.
- 5284.0-5325.0 Feet - Non-productive due to low permeability.

These recovery estimates represent theoretical maximum values for solution gas and water drive. They assume that production is started at original reservoir pressure; i.e., no account is taken of production to date or of prior drainage to other areas. The effects of factors tending to reduce actual ultimate recovery, such as economic limits on oil production rates, gas-oil ratios, or water-oil ratios, have not been taken into account. Neither have factors been considered which may result in actual recovery intermediate between solution gas and complete water drive recoveries, such as gas cap expansion, gravity drainage, or partial water drive. Detailed predictions of ultimate oil recovery to specific abandonment conditions may be made in an engineering study in which consideration is given to overall reservoir characteristics and economic factors.

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc., and its officers and employees assume no responsibility and make no warranty or representation as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

Form 9-331  
(May 1963)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE\*  
(Other instructions on re-  
verse side)

Form approved  
Budget Bureau No. 42-11424

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-716

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo "O"

9. WELL NO.

9

10. FIELD AND POOL, OR WILDCAT

Teec Nos Pos - Ismay

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA

Sec. 26-T41N-R30E

12. COUNTY OR PARISH

Apache

13. STATE

Arizona

14. PERMIT NO.

687

15. ELEVATIONS (Show whether DF, ET, GR, etc.)

G.L. Elev. 5,231'; K.B. Elev. 5,244'

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

SUBSEQUENT REPORT OF:

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well  
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

The above described well was spudded at 5:30 p.m., 11-21-77. Drilled 12-1/4" hole to 525'. Ran 13 jts, 507' (net), 8-5/8" OD, 24#, K-55, 8Rth, SS, ST&C, new casing set at 520' K.B. Cemented w/385 sx of Class "B" cement w/2% CaCl<sub>2</sub> and 1/4# Flocele/sx. Good cement returns. Plug down at 7:10 a.m., 11-22-77. Nippled up and tested BOPE to 800 psi. Held O.K. Drilled out w/7-7/8" bit at 7:15 p.m., 11-22-77.

18. I hereby certify that the foregoing is true and correct

SIGNED

*Robert C. Hillier*

TITLE Drilling Superintendent

DATE 11-23-77

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

RECEIVED

NOV 25 1977

O & G CONS. COMM.

\*See Instructions on Reverse Side

# SUNDY NOTICES AND REPORTS ON WELLS

1. Name of Operator Energy Reserves Group, Inc.  
 2. Oil WELL ☒ GAS WELL ☐ OTHER ☐ (Specify) \_\_\_\_\_  
 3. Well Name Navajo "O" #19  
 Location 2,310' FNL and 1,650' FEL SW NE  
 Sec. 26 Twp. 41N Rge. 30E County Apache Arizona.  
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease 14-20-603-716

5. Field or Pool Name Teec Nos Pos

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:			SUBSEQUENT REPORT OF:		
TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	DIRECTIONAL DRILL	<input type="checkbox"/>	FRACTURE TREATMENT	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	PERFORATE CASING	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input checked="" type="checkbox"/>	MONTHLY PROGRESS	<input type="checkbox"/>
(OTHER)	<input type="checkbox"/>		(OTHER)	REPAIRING WELL	<input type="checkbox"/>
				ALTERING CASING	<input type="checkbox"/>
				ABANDONMENT	<input type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

## Change Plans:

Energy Reserves Group, Inc., proposes to drill the referenced well to the Lower Hermosa. It is also planned to cut one core from the Lower Ismay.

The revised <sup>est.</sup> formation tops are as follows:

Chinle	1,693'	
De Chelly	2,661'	
Cutler	2,973'	
Hermosa	4,465'	
Upper Ismay	5,199'	
Lower Ismay	5,263'	
Desert Creek	5,343'	
Akah	5,487'	
Barker Creek	5,617'	
Lower Hermosa	5,847'	i.e. Pinkerton Trail
T.D.	5,850'	

RECEIVED

NOV 17 1977

O & G CONS. COMM.

8. I hereby certify that the foregoing is true and correct.

Signed [Signature]

Field Services Administrator

Date 11/14/77

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 Sundry Notices and Reports On Wells  
 File Two Copies

Form No. 25

Permit No. \_\_\_\_\_

# APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

Energy Reserves Group, Inc.  
NAME OF COMPANY OR OPERATOR

P. O. Box 3280 Casper Wyoming 82602  
Address City State

Coleman Drilling Company  
Drilling Contractor

P. O. Box 1915, Farmington, New Mexico 87401  
Address

## DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor 14-20-603-716	Well number "O" #9	Elevation (ground) 5232
Nearest distance from proposed location to property or lease line: 3010 feet	Distance from proposed location to nearest drilling completed or applied—for well on the same lease: 1980 feet	
Number of acres in lease: 2560	Number of wells on lease, including this well, completed in or drilling to this reservoir: 7	
If lease, purchased with one or more wells drilled, from whom purchased: Amoco Production Company, P. O. Box 591, Tulsa, Oklahoma		
Well location (give footage from section lines) 2310' FNL 1650' FEL	Section—township—range or block and survey Sec. 26-T41N-R30E	Dedication (Comply with Rule 105) 80 acres W/2 NE4
Field and reservoir (if wildcat, so state) Teec Nos Pos	County Apache	
Distance, in miles, and direction from nearest town or post office 1.5 miles Northwest of Teec Nos Pos Trading Post		
Proposed depth: 5375' 5850	Rotary or cable tools Rotary	Approx. date work will start November 1977
Bond Status Active	Organization Report On file July 1970 or attached	Filing Fee of \$25.00 Attached X
Amount \$25,000.00		

Remarks:  
Energy Reserves Group, Inc. proposes to drill the referenced well with rotary tools. No cores are anticipated. Potential zones which may be tested are the Lower Ismay at 5,239' and the Desert Creek at 5,304'. Copies of all logs run will be furnished upon completion of the well. Our anticipated completion zone is the Lower Ismay.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Field Services Administrator of the Energy Reserves Group, Inc. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

NOV 14 1977

O & G CONS. COMM.

Signature

November 7, 1977

Date

Permit Number: 487

Approval Date: 11-14-77

Approved By: *W.B. Allen*

Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION  
Application to Drill or Re-enter  
File Two Copies

Form No. 3

1. Operator shall outline the dedicated acreage for both oil and gas wells on the plat.
2. A registered professional engineer or land surveyor registered in the State of Arizona or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.
3. All distances shown on the plat must be from the outer boundaries of the Section.
4. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES ☒ NO ☐
5. If the answer to question four is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES ☐ NO ☐ If answer is "yes," Type of Consolidation \_\_\_\_\_
6. If the answer to question four is "no," list all the owners and their respective interests below:

Owner	Land Description

**CERTIFICATION**

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Name William J. [Signature]

Position Field Services Administrator

Company Energy Reserves Group, Inc.

Date November 7, 1977

I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed \_\_\_\_\_

Registered Professional Engineer and/or Land Surveyor \_\_\_\_\_

Certificate No. \_\_\_\_\_

**PROPOSED CASING PROGRAM**

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
8-5/8"	24#	MU-46	Surf.	500'±	0-500'	360 sx.
5-1/2"	14#	K-55	Surf.	5230'± 5375'	4975-5375'	150 sx.

COMPANY Energy Reserves Group, Inc.

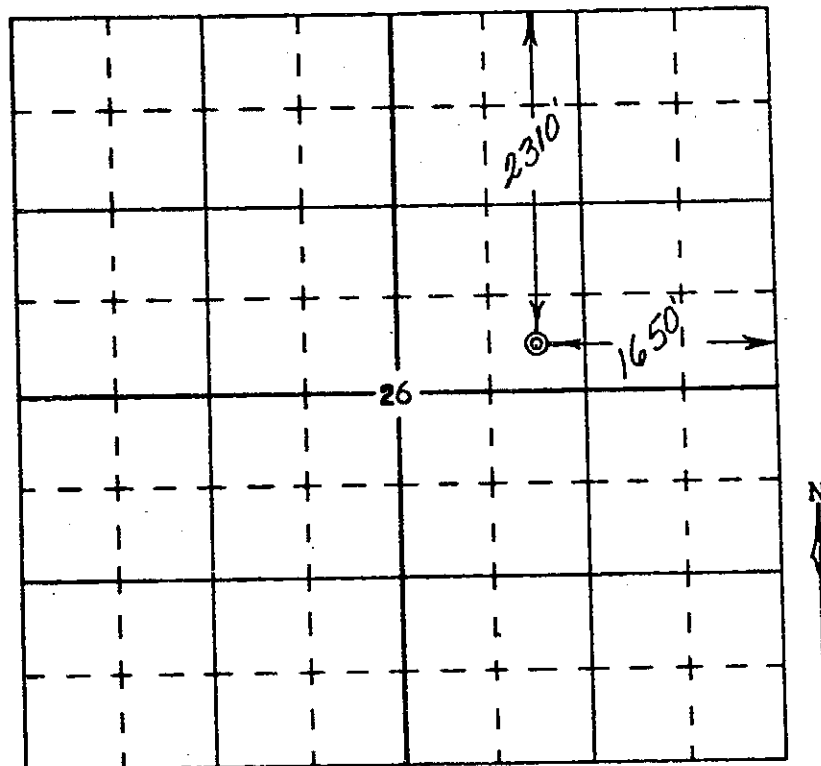
Well Name & No. Navajo "O" No. 9 Lease No. \_\_\_\_\_

Location 2310 feet from North line and 1650 feet from East line

Being in Apache County, Arizona

Sec. 26, T.41N., R.30E., G. & S.R.M.

Ground Elevation 5232

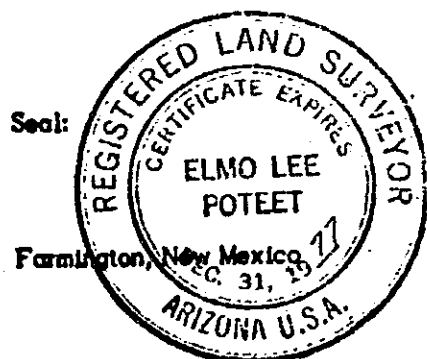


Scale - 4 inches equals 1 mile

Surveyed November 7, 19 77

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Seal:



Registered Professional  
Engineer and Land Surveyor  
Arizona Surveyor No. 5279

RECEIVED

NOV 14 1977

D & G CONS. COMM.



## PERMIT TO DRILL

This constitutes the permission and authority from the

OIL AND GAS CONSERVATION COMMISSION,  
STATE OF ARIZONA,

To: ENERGY RESERVES GROUP, INC.  
(OPERATOR)

to drill a well to be known as

NAVAJO "O" NO. 9  
(WELL NAME)

located 2310 FNL & 1650 FEL (SW/NE 1/4)

Section 26 Township 41N Range 30E, Apache County, Arizona.

The W/2 of the NE/4 of said  
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled  
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 14 day of November, 19 77.

OIL AND GAS CONSERVATION COMMISSION

By W. O. [Signature]  
EXECUTIVE SECRETARY

PERMIT **Nº 687**

RECEIPT NO. 1004

API No. 02-001-20236

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27

SAMPLES ARE REQUIRED



**Oil and Gas Conservation Commission**  
STATE OF ARIZONA

5150 N. 16th STREET, SUITE B-141  
PHOENIX, ARIZONA 85016  
PHONE: (602) 255-5161

October 9, 1990

*Permit 637*

Seaboard Surety Company  
5750 Pineland Drive, Suite 304  
Dallas, TX 75231-5366

RE: Release of BHP Petroleum (Americas) Bond No. 731451

Gentlemen:

In reply to your letter of October 3, 1990, this letter represents approval to release the referenced performance bond 731451.

Sincerely,

*Steven L. Rauzi*

Steven L. Rauzi  
Oil & Gas Specialist



## SEABOARD SURETY COMPANY

F.C. MCINTOSH  
RESIDENT VICE PRESIDENT

JIM MAYFIELD  
MANAGER

October 3, 1990

Permit 637

CERTIFIED MAIL  
P 774 177 957

Oil and Gas Conservation Commission  
5150 N. 16th Street  
Suite B-141  
Phoenix, Arizona 85016

Re: Bond No. 731451  
BHP Petroleum (Americas) <Clinton Oil Company>  
Gas/Oil Drilling  
Effective: September 18, 1970

Gentlemen:

We, the Seaboard Surety Company as surety on the above captioned bond, hereby serve notice of our intent to terminate our liability under this bond effective Thirty (30) days from your receipt of this letter.

It would be appreciated if you would acknowledge this cancellation and a stamped envelope is enclosed for your convenience in reply.

Thank you very much.

Sincerely,

*Lyndse Stratton*

Lyndse Stratton  
Bond Secretary

/ls

Acknowledged By: *Steven L. Ramirez*

cc: Art Charette  
Misc. Dept.  
cc: Alexander & Alexander, Inc.  
Houston, Texas

Title *Oil & Gas Specialist*

Date *10-9-90*



**Oil and Gas Conservation Commission**

STATE OF ARIZONA

5150 N. 16th STREET, SUITE B-141  
PHOENIX, ARIZONA 85016  
PHONE: (602) 255-5161

*Permit 687*

September 18, 1990

Mr. Dwight Tickle  
BHP Petroleum (Americas) Inc.  
5847 San Felipe, Suite 3600  
Houston, TX 77057

RE: BHP bonds 731451 and 81116621

Dear Mr. Tickle:

Jerry W. Bair requested that I send a copy of BHP bonds 731451 and 81116621 to your attention. I have also enclosed a copy of R. A. Ybarra's 12/24/87 letter to J. W. Bair.

Since the new operator has filed their own bond, you may now request cancellation of the BHP bonds.

Let me know if I can be of further assistance.

Sincerely,

*Steven L. Rauzi*

Steven L. Rauzi  
Oil & Gas Specialist

Enclosures



**Oil and Gas Conservation Commission**

STATE OF ARIZONA

3110 N. 19th AVENUE, SUITE 190

PHOENIX, ARIZONA 85015

PHONE: (602) 255-5161

December 24, 1987

BHP Petroleum  
5613 DTC Parkway, Ste 600  
Englewood, CO 80111

Attn: J. W. Bair

Gentlemen:

Thank you for your letter of Dec. 21, 1987, confirming the sale of property in the Dry Mesa and Teec Nos Pos fields to Cross Creek Corp.

Please be aware that your bonds (Nos. 731451 and 8111-66-21) on these properties cannot be released until Cross Creek files their own bond(s), which to date they have not done.

If we can be of any assistance, please advise.

Sincerely,

*R. A. Ybarra*  
R. A. Ybarra  
Enforcement Director

RAY:lr

DEC 23 1987

O & G CONSV. COM.

Suite 600  
5613 DTC Parkway  
Englewood, Colorado 80111  
Telephone (303) 850-9090  
DEX: (303) 850-9110

December 21, 1987



Oil and Gas Conservation Commission  
State of Arizona  
Suite 190  
3220 N. 19th Avenue  
Phoenix, Arizona 85015  
Attn: R. A. Ybarra

Re: Transfer of Property  
Dry Mesa and Teec Nos Pos Fields  
Apache County, Arizona

Gentlemen:

Pursuant to your letter dated October 14, 1987 (copy attached), this is to notify you that Tract 138 property in Dry Mesa Field and property in Teec Nos Pos Field, Apache County, Arizona, has been sold by BHP Petroleum (Americas) to Cross Creek Corporation, P. O. Box 1957, Duncan, Oklahoma 73534. Operations were assumed from BHP by Cross Creek at 7:00 a.m. on April 1, 1987. A list of wells involved is attached.

If you have any further questions, please do not hesitate to contact us.

Very truly yours,

BHP PETROLEUM (AMERICAS) INC.

A handwritten signature in dark ink, appearing to read "JWB", is written over the typed name "Jerry W. Bair".  
Jerry W. Bair

/js  
Attachment

WELL LOCATIONS

BHP Petroleum (Americas) Inc.

<u>Well Name</u>	<u>Description</u>
Old Trading Post #1	790' FSL and 1850' FWL Sec. 10, T26N, R14W
Navajo "O" #1	1880' FWL and 660' FSL Sec. 23, T41N, R30E
Navajo "O" #2	1830' FSL and 1930' FEL Sec. 23, T41N, R30E
Navajo "O" #3	1000' FSL and 900' FWL Sec. 23, T41N, R30E
Navajo "O" #4	660' FSL and 660' FEL Sec. 23, T41N, R30W
Navajo "O" #5	560' FNL and 660' FEL Sec. 26, T41N, R30E
Navajo Tract 138 #1	660' FNL and 660' FEL Sec. 11, T40N, R28E
Navajo Tract 138 #2	1980' FNL and 660' FWL Sec. 12, T40N, R28E
Navajo Tract 138 #3	760' FSL and 2035' FEL Sec. 2, T40N, R28E
Navajo Tract 138 #6	1689.5' FSL and 2289.7' FWL Sec. 2, T40N, R28E



**Oil and Gas Conservation Commission**

STATE OF ARIZONA

3110 N. 19th AVENUE, SUITE 190

PHOENIX, ARIZONA 85015

PHONE: (602) 255-5161

October 14, 1987

BHP Petroleum Company, Inc.  
1300 Post Oak Tower  
5051 Westheimer  
Houston, TX 77056

RE: Transfer of Property  
Dry Mesa and Teec Nos Pos Fields  
Apache County, Arizona

Gentlemen:

We understand that certain wells located in the above-captioned fields have been transferred to Cross Creek Corp., effective July 20, 1987.

Please be informed that BHP is also required to notify the Commission in writing to confirm the transfer. Identify and give a location for each well transferred and confirm the effective date of transfer.

Your bonds, Nos. 731451 and 8111-66-21, will be released as soon as we receive proper bonding from the new operator.

If you have any questions on this matter, please call.

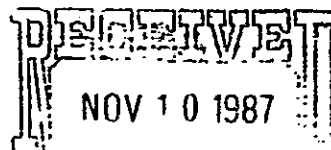
Sincerely,

*R. A. Ybarra*  
R. A. Ybarra  
Enforcement Director

/kb

cc: Cross Creek Corp.  
P. O. Box 447  
Farmington, NM 87499-0447

NOV 4 1987



BHP PETROLEUM  
DNV LAND DEPT.

1300 Post Oak Tower  
5051 Westheimer  
Houston, Texas 77056  
Telephone (713) 877-5999  
Fax (713) 877-5950  
Telex 262496



August 19, 1986

Mr. R. A. Ybarra  
Enforcement Director  
Oil & Gas Conservation Commission  
State of Arizona  
1645 West Jefferson, Suite 420  
Phoenix, Arizona 85007

Re: BHP Petroleum (Americas)-  
Bond #731451  
BHP Petroleum Company -  
Bond #8111-66-21

Dear Mr. Ybarra:

Pursuant to your request July 16, 1986 of Ms. Diana Jones, we submit the following well information by company:

BHP Petroleum Company Apache County, Arizona  
Formerly: Monsanto Oil Company  
Dry Mesa Field  
Navajo Tract 138  
Well #'s

State Permit No.

1	77
2	106
3	115
6	852

Legal Description on the above is: Sec 1, 2, 11 & 12 TWP 40N-29.

BHP Petroleum (Americas) Apache County, Arizona  
Teec Nos Pos, Ismay Field  
Navajo Tribal '0'

Well #'s

State Permit No.

Section No.

TWP 41N-30E.

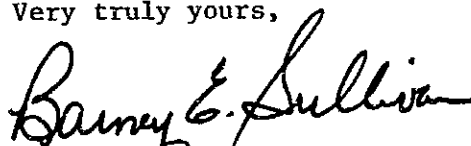
1	232	23
2	582	23
3	640	23
4	663	23
5	678	26
6	683	25
9	687	26

Page 2

All 7 wells are in TWP 41N-30E.

We appreciate your patience in this matter as we also had clarification to do for our benefit. Should you have further questions, please advise.

Very truly yours,



Barney E. Sullivan  
Manager, Bond & Insurance

BES:jm  
8/65



Operator BHP Petroleum (Americas) Inc.

Bond Company Seaboard Surety Company Amount \$25,000

Bond No. 731451 Date Approved 9/12/85

Permits covered by this bond:

*Pls Mesa Corp.  
Bond  
PIN 27*

**CANCELLED**

DATE

232

582

640

663

678

683

685

(Cancelled)

686

P+A 11-20-77

687

P+A 4-26-85

688

(Cancelled)

689

(Cancelled)

800

(Organization Report) [cancelled]

10-9-90

RECEIVED

SEP 12 1985

O & G CONS. COMM.

217 North Water Street  
Post Office Box 1201  
Wichita, Kansas 67201  
Telephone (316) 265-7721  
Fax (316) 264-6929  
Telex II (910) 741-6940



**BHP**  
**Petroleum**  
(Americas) Inc

September 9, 1985

State of Arizona  
Oil & Gas Conservation Commission  
1624 W. Adams, Room 202  
Phoenix, AZ 85007

Re: Bond #731451  
Blanket Drilling & Operator's Bond  
Principal: Energy Reserves Group, Inc.

Gentlemen:

Please be advised effective July 11, 1985, Energy Reserves Group, Inc., changed its name to:

**BHP PETROLEUM (AMERICAS) INC.**

Enclosed is a Bond Name Change Endorsement which we request you attach to the captioned bond.

Thank you for your cooperation and should you have any questions or have any concerns regarding this change, please contact me at the address or telephone number set out on this letterhead, as soon as possible.

Very truly yours,

BHP PETROLEUM (AMERICAS) INC.

*Barney E. Sullivan*

Barney E. Sullivan  
Manager, Bonds & Insurance

BES/skb

Enclosure

*Re: Prod. Reports*  
*(303) 850 9090 Denver, CO*

ENDORSEMENT

RECEIVED  
SEP 12 1985

It is hereby agreed that the Name of the Principal on the Bond to which this Endorsement is attached is changed to:

BHP PETROLEUM (AMERICAS) INC.

This endorsement is effective on the 11 day of JULY 19 85  
Nothing herein contained shall be held to vary, alter, waive, or extend any of the terms, conditions, agreements, or limitations of the attached bond other than as above stated.  
Attached to and forming a part of Bond No. 731451  
Issued to ENERGY RESERVES GROUP, INC.

In Witness Whereof, SEABOARD SURETY COMPANY has caused this endorsement to be executed by its officers or agent duly authorized thereunto, this 31 day of JULY 19 85

Attest:

SEABOARD SURETY COMPANY

By

*Susan C. Warren*  
Susan C. Warren, Attorney-in-fact

Certified Copy

No. 1321

# SEABOARD SURETY COMPANY

New York, New York

## POWER OF ATTORNEY

G 1361

**KNOW ALL MEN BY THESE PRESENTS:** That SEABOARD SURETY COMPANY, a corporation of the State of New York, has made, constituted and appointed and by these presents does make, constitute and appoint R. B. Matassarini, W. C. Cohen, Jr., Roberta I. Heorman, Paul C. Yankey, Jr., Joe E. Moddrell, Jr., Susan C. Warren, Joseph C. Lukens II, Scott T. Post, Richard K. Stone, Ken W. Johnson, Jay E. Chapple of Wichita, Kansas

its true and lawful Attorney-in-Fact, to make, execute and deliver on its behalf insurance policies, surety bonds, undertakings and other instruments of similar nature as follows: Without Limitations

RECEIVED

SEP 12 1985

Such insurance policies, surety bonds, undertakings and instruments for said purposes, when duly executed by the aforesaid Attorney-in-Fact, shall be binding upon the said Company as fully and to the same extent as if signed by the duly authorized officers of the Company and sealed with its corporate seal; and all the acts of said Attorney-in-Fact, pursuant to the authority hereby given, are hereby ratified and confirmed.

This appointment is made pursuant to the following By-Laws which were duly adopted by the Board of Directors of the said Company on December 8th, 1927, with Amendments to and including January 15, 1982 and are still in full force and effect:

### ARTICLE VII, SECTION 1:

"Policies, bonds, recognizances, stipulations, consents of surety, underwriting undertakings and instruments relating thereto, insurance policies, bonds, recognizances, stipulations, consents of surety and underwriting undertakings of the Company, and releases, agreements and other writings relating in any way thereto or to any claim or loss thereunder, shall be signed in the name and on behalf of the Company (a) by the Chairman of the Board, the President, a Vice-President or a Resident Vice-President and by the Secretary, an Assistant Secretary, a Resident Secretary or a Resident Assistant Secretary; or (b) by an Attorney-in-Fact for the Company appointed and authorized by the Chairman of the Board, the President or a Vice-President to make such signature; or (c) by such other officers or representatives as the Board may from time to time determine. The seal of the Company shall if appropriate be affixed thereto by any such officer, Attorney-in-Fact or representative."

**IN WITNESS WHEREOF,** SEABOARD SURETY COMPANY has caused these presents to be signed by one of its Vice-Presidents, and its corporate seal to be hereunto affixed and duly attested by one of its Assistant Secretaries, this 27th day of September, 1984



Attest:

(Seal)

*Orville J. Leonard*  
Assistant Secretary

SEABOARD SURETY COMPANY

By

*[Signature]*  
Vice-President

STATE OF NEW YORK  
COUNTY OF NEW YORK

On this 27th day of September, 1984, before me personally appeared R. T. Gundersen, a Vice-President of SEABOARD SURETY COMPANY, with whom I am personally acquainted, who, being by me duly sworn, said that he resides in the State of New York, that he is a Vice-President of SEABOARD SURETY COMPANY, the corporation described in and which executed the foregoing instrument; that he knows the corporate seal of the said Company; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said Company; and that he signed his name thereto as Vice-President of said Company by like authority.

(Seal)

MARGARET M. QUIMLAN  
Notary Public, State of New York  
No. 01018463870  
Qualified in Richmond County  
Certificate Filed in New York County  
Commission Expires March 30, 1988

*Margaret M. Quimlan*  
Notary Public

I, the undersigned Assistant Secretary of SEABOARD SURETY COMPANY do hereby certify that the original Power of Attorney of which the foregoing is a full, true and correct copy, is in full force and effect on the date of this Certificate and I do further certify that the Vice-President who executed the said Power of Attorney was one of the Officers authorized by the Board of Directors to appoint an attorney-in-fact as provided in Article VII, Section 1, of the By-Laws of SEABOARD SURETY COMPANY.

This Certificate may be signed and sealed by facsimile under and by authority of the following resolution of the Executive Committee of the Board of Directors of SEABOARD SURETY COMPANY at a meeting duly called and held on the 25th day of March 1970:

"RESOLVED: (2) That the use of a printed facsimile of the corporate seal of the Company and of the signature of an Assistant Secretary on any certification of the correctness of a copy of an instrument executed by the President or a Vice-President pursuant to Article VII, Section 1, of the By-Laws appointing and authorizing an attorney-in-fact to sign in the name and on behalf of the Company surety bonds, underwriting undertakings or other instruments described in said Article VII, Section 1, with like effect as if such seal and such signature had been manually affixed and made, hereby is authorized and approved."

**IN WITNESS WHEREOF,** I have hereunto set my hand and affixed the corporate seal of the Company to these presents this 31st day of July, 1985



*[Signature]*  
Assistant Secretary

*[Signature]*  
Assistant Secretary

Form 957 (Rev. 7/84)

Operator BAP Ref (Am) Inc  
CLINTON OIL COMPANY (name chgd Energy Reserve  
Group)

Bond Company SEABOARD SURETY COMPANY Amount \$25,000

Bond No. 731341 23-24-51 Date Approved 10-6-70

Date Bond: 9-18-70

Permits covered by this bond:

CANCELLED  
DATE

- 232 ✓
- 582
- 640
- 663
- 678
- 683
- 685 cancelled
- 686
- 687
- 688 cancelled organig.
- 689 also rept
- 800
- 801 Revised State Record
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Energy Reserves Group, Inc.  
P.O. Box 1201, Zip 67201  
217 North Water Street  
Wichita, Kansas  
Phone 316 265 7721

 Energy Reserves Group

March 9, 1976

W. E. Allen  
Director Enforcement Section  
Oil & Gas Conservation Commission  
Room 202  
1624 West Adams  
Phoenix, Arizona 85007

**CANCELLED**  
Re: Corporate Surety Bond  
No. 731451  
Energy Reserves Group, Inc.  
Formerly Clinton Oil Company  
DATE \_\_\_\_\_

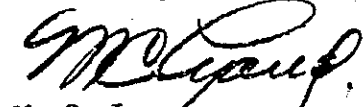
Gentlemen:

The Clinton Oil Company has recently changed their name to Energy Reserves Group, Inc. Our records reflect the above Corporation Surety Bond is currently on file with your office covering the operations of Clinton Oil Company.

We enclose Name Change rider and Endorsement to be attached to and form part of the above Bond, changing the Name of the Principal to Energy Reserves Group, Inc.

Evidence and authority granting the above name change has been filed with the appropriate State Departments. Please advise us immediately if the above enclosure is not entirely satisfactory.

Yours very truly,

  
M. C. Lyons  
Insurance Dept.

MCL:mh

Enc.

RECEIVED

MAR 12 1976

O & G CONS. COMM.

ENDORSEMENT

It is hereby agreed that the Name of the Principal on the Bond to which this endorsement is attached is changed to:

ENERGY RESERVES GROUP, INC.

This endorsement is effective on the 11th day of February 19 76  
Nothing herein contained shall be held to vary, alter, waive, or extend any of the terms, conditions, agreements, or limitations of the attached bond other than as above stated.  
Attached to and forming a part of Bond No. 73 14 51  
Issued to Clinton Oil Company

In Witness Whereof, SEABOARD SURETY COMPANY has caused this endorsement to be executed by its officers or agent duly authorized thereunto, this 2nd day of March 19 76

Attest: Evelyn Houchin SEABOARD SURETY COMPANY  
(Evelyn Houchin) Attorney-in-fact By A. C. Hiebert  
(A. C. Hiebert) Attorney-in-fact

Attest: Joan Lynch SEABOARD SURETY COMPANY,  
(Seal) Assistant Secretary By John C. Whiteside  
Vice-President

STATE OF NEW YORK } ss.:  
COUNTY OF NEW YORK }

On this 13th day of August, 19 75, before me personally appeared John C. Whiteside a Vice-President of SEABOARD SURETY COMPANY, with whom I am personally acquainted, who, being by me duly sworn, said that he resides in the State of New Jersey; that he is a Vice-President of SEABOARD SURETY COMPANY, the corporation described in and which executed the foregoing instrument; that he knows the corporate seal of the said Company; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said Company; and that he signed his name thereto as Vice-President of said Company by like authority.

State of New York  
No. 43-4508755 Qualified in Richmond County  
Certificate filed in New York County  
(Seal) Commission Expires March 30, 1977 Karen Gavrity  
Notary Public

CERTIFICATE

I, the undersigned Assistant Secretary of SEABOARD SURETY COMPANY do hereby certify that the original Power of Attorney of which the foregoing is a full, true and correct copy, is in full force and effect on the date of this Certificate and I do further certify that the Vice President who executed the said Power of Attorney was one of the Officers authorized by the Board of Directors to appoint an attorney-in-fact as provided in Article VIII, Section 1, of the By-Laws of SEABOARD SURETY COMPANY.

This Certificate may be signed and sealed by facsimile under and by authority of the following resolution of the Board of Directors of SEABOARD SURETY COMPANY at a meeting duly called and held on the 25th day of March 1970.

"RESOLVED: (2) That the use of a printed facsimile of the corporate seal of the company and of the signature of an Assistant Secretary on any certification of the correctness of a copy of an instrument executed by the President or a Vice-President pursuant to Article VIII, Section 1, of the By-Laws appointing and authorizing an attorney-in-fact to sign in the name and on behalf of the company surety bonds, underwriting undertakings or other instruments described in said Article VIII, Section 1, with like effect as if such seal and such signature had been manually affixed and made, hereby is authorized and approved."

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Company to these presents this 2nd day of March, 19 76.



Joan Lynch  
Assistant Secretary  
Form 957 (Rev. 4-74)

ENDORSEMENT

It is hereby agreed that the Name of the Principal on the Bond to which this endorsement is attached is changed to:

ENERGY RESERVES GROUP, INC.

This endorsement is effective on the 11th day of February 19 76

Nothing herein contained shall be held to vary, alter, waive, or extend any of the terms, conditions, agreements, or limitations of the attached bond other than as above stated.

Attached to and forming a part of Bond No. 73 14 51

Issued to Clinton Oil Company

In Witness Whereof, SEABOARD SURETY COMPANY has caused this endorsement to be executed by its officers or agent duly authorized thereunto, this 2nd day of March 19 76

Attest:

Evelyn Houchin  
(Evelyn Houchin) Attorney-in-fact

SEABOARD SURETY COMPANY

By A. C. Hiebert  
(A. C. Hiebert) Attorney-in-fact



ENDORSEMENT

It is hereby agreed that the Name of the Principal on the  
Bond to which this endorsement is attached is changed to:

ENERGY RESERVES GROUP, INC.

This endorsement is effective on the 11th day of February 19 76  
Nothing herein contained shall be held to vary, alter, waive, or extend any of the terms, conditions,  
agreements, or limitations of the attached bond other than as above stated.  
Attached to and forming a part of Bond No. 73 14 51  
Issued to Clinton Oil Company

In Witness Whereof, SEABOARD SURETY COMPANY has caused this endorsement to be executed  
by its officers or agent duly authorized thereunto, this 2nd day of March 19 76

Attest:

Evelyn Houchin  
(Evelyn Houchin) Attorney-in-fact

SEABOARD SURETY COMPANY

By A. C. Hiebert  
(A. C. Hiebert) Attorney-in-fact

Certified Copy

SEABOARD SURETY COMPANY  
HOME OFFICE

No. 7655

NEW YORK, NEW YORK

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That SEABOARD SURETY COMPANY, a corporation of the State of New York, has made, constituted and appointed and by these presents does make, constitute and appoint A. C. Ambrosia or A. C. Hiebert or James A. Devan or Robert C.

Brent or Evelyn Houchin or James W. Bily or Bill Hall or Donald E. Gragg or Leonard A. Colagrossi-----

of Wichita, Kansas  
its true and lawful Attorney-in-Fact, to make, execute and deliver on its behalf insurance policies, surety bonds, undertakings and other instruments of similar nature as follows: Without Limitations

Such insurance policies, surety bonds, undertakings and instruments for said purposes, when duly executed by the aforesaid Attorney-in-Fact, shall be binding upon the said Company as fully and to the same extent as if signed by the duly authorized officers of the Company and sealed with its corporate seal; and all the acts of said Attorney-in-Fact, pursuant to the authority hereby given, are hereby ratified and confirmed.

This appointment is made pursuant to the following By-Laws which were duly adopted by the Board of Directors of the said Company on December 8th, 1927, and are still in full force and effect:

ARTICLE VIII, SECTION 1:

"Policies, bonds, recognizances, stipulations, consents of surety, underwriting undertakings and instruments relating thereto. Insurance policies, bonds, recognizances, stipulations, consents of surety and underwriting undertakings of the Company, and releases, agreements and other writings relating in any way thereto or to any claim or loss thereunder, shall be signed in the name and on behalf of the Company

(a) by the Chairman of the Board, the President, a Vice President or a Resident Vice President and by the Secretary, an Assistant Secretary, a Resident Secretary or a Resident Assistant Secretary; or

(b) by an Attorney-in-Fact for the Company appointed and authorized by the Chairman of the Board, the President or a Vice President to make such signature; or

(c) by such other officers or representatives as the Board may from time to time determine.

The seal of the Company shall if appropriate be affixed thereto by any such officer, Attorney-in-Fact or representative."

IN WITNESS WHEREOF, SEABOARD SURETY COMPANY has caused these presents to be signed by one of its Vice-Presidents, and its corporate seal to be hereunto affixed and duly attested by one of its Assistant Secretaries, this 13th day of August, 1975.

Attest:

(Seal) Joan Lynch  
Assistant Secretary

SEABOARD SURETY COMPANY,

By John C. Whiteside  
Vice-President

STATE OF NEW YORK } ss.:  
COUNTY OF NEW YORK }

On this 13th day of August, 1975, before me personally appeared John C. Whiteside, a Vice-President of SEABOARD SURETY COMPANY, with whom I am personally acquainted, who, being by me duly sworn, said that he resides in the State of New Jersey; that he is a Vice-President of SEABOARD SURETY COMPANY, the corporation described in and which executed the foregoing instrument; that he knows the corporate seal of the said Company; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said Company; and that he signed his name thereto as Vice-President of said Company by like authority.

State of New York

No. 43-4508755 Qualified in Richmond County

Certificate filed in New York County

(Seal) Commission Expires March 30, 1977

Karen Gavrity

Notary Public

CERTIFICATE

I, the undersigned Assistant Secretary of SEABOARD SURETY COMPANY do hereby certify that the original Power of Attorney of which the foregoing is a full, true and correct copy, is in full force and effect on the date of this Certificate and I do further certify that the Vice President who executed the said Power of Attorney was one of the Officers authorized by the Board of Directors to appoint an attorney-in-fact as provided in Article VIII, Section 1, of the By-Laws of SEABOARD SURETY COMPANY.

This Certificate may be signed and sealed by facsimile under and by authority of the following resolution of the Board of Directors of SEABOARD SURETY COMPANY at a meeting duly called and held on the 25th day of March 1970.

"RESOLVED: (2) That the use of a printed facsimile of the corporate seal of the company and of the signature of an Assistant Secretary on any certification of the correctness of a copy of an instrument executed by the President or a Vice-President pursuant to Article VIII, Section 1, of the By-Laws appointing and authorizing an attorney-in-fact to sign in the name and on behalf of the company surety bonds, underwriting undertakings or other instruments described in said Article VIII, Section 1, with like effect as if such seal and such signature had been manually affixed and made, hereby is authorized and approved."

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the Company to these presents this 2nd day of March, 1976.



Joan Lynch  
Assistant Secretary

KNOW ALL MEN BY THESE PRESENTS

Bond Serial No. 731451

That we: Clinton Oil Company - 217 N. Water St., Wichita

of the County of Sedgwick In the State of Kansas 67202

as principal, and Seaboard Surety Company

of New York, New York

AUTHORIZED TO DO BUSINESS WITHIN the State of Arizona.

as surety, are held and firmly bound unto the State of Arizona and the Oil and Gas Conservation Commission, hereinafter referred to as the "Commission", in the penal sum of Twenty-Five Thousand (\$25,000) lawful money of the United States, for which payment, well and truly to be made, we bind ourselves, and each of us, and each of our heirs, executors, administrators or successors, and assigns jointly and severally, firmly by these presents.

The conditions of this obligation are that, whereas the above bounden principal proposes to drill a well or wells for oil, gas or stratigraphic purposes in and upon the following described land situated within the State, to-wit:

All operations within the state.

(May be used as blanket bond or for single well)

NOW, THEREFORE, if the above bounden principal shall comply with all the provisions of the Laws of this State and the rules, regulations and orders of the Commission, especially with reference to the requirements of A.R.S. §27-516, providing for the proper drilling, casing and plugging of said well or wells, and filing with the Oil and Gas Conservation Commission all notices and records required by said Commission, then in the event said well or wells do not produce oil or gas in commercial quantities, or cease to produce oil or gas in commercial quantities, this obligation is void; otherwise it shall remain in full force and effect.

Whenever the principal shall be, and declared by the Oil and Gas Conservation Commission in violation of the Laws of this State and the rules, regulations and orders of the Commission, the surety shall promptly:

1. Remedy the violation by its own efforts, or
2. Obtain a bid or bids for submission to the Commission to remedy the violation, and upon determination by the Commission and the Surety of the lowest responsible bidder, arrange for a contract between such bidder and the Commission, and make available as work progresses sufficient funds to pay the cost of remedying the violation; but not exceeding, including other costs and damages for which the surety may be liable hereunder, the amount set forth in the first paragraph hereof.

Liability under this bond may not be terminated without written permission of this Commission.

WITNESS our hands and seals this 18th day of September, 1970

CLINTON OIL COMPANY

By: *St. Myrick*

Principal, Vice Pres.

WITNESS our hands and seals this 18th day of September, 1970

Countersigned Phoenix, Arizona

Seaboard Surety Company

By: *[Signature]*

Standard Ins. Agency

By: *A. C. Hiebert*

(A. C. Hiebert) Surety Attorney-in-fact

Surety, Resident Arizona Agent  
If issued in a state other than Arizona)

If the principal is a corporation, the bond should be executed by its duly authorized officer, with the seal of the corporation affixed. When principal or surety executes this bond by agent, power of attorney or other evidence of authority must accompany the bond.)

Approved Date 10-6-70
STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION
By: <i>John Bannister</i>

Permit No. 232

UBA

STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION
Bond
File Two Copies
Form No. 2

Certified Copy

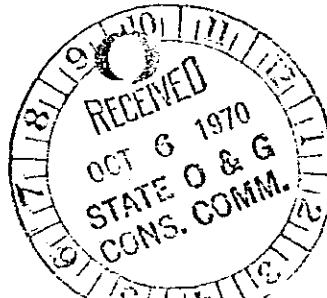
No. 6380

# SEABOARD SURETY COMPANY

HOME OFFICE

NEW YORK, NEW YORK

## POWER OF ATTORNEY



KNOW ALL MEN BY THESE PRESENTS: That SEABOARD SURETY COMPANY, a corporation of the State of New York, has made, constituted and appointed and by these presents does make, constitute and appoint R. J. Noble or A. C. Ambrosia or A. C. Hiebert or James A. Bevan or Robert C. Brent or Evelyn Houchin or Paul A. Elliott,-----

of Wichita, Kansas,

its true and lawful Attorney-in-Fact, to make, execute and deliver on its behalf insurance policies, surety bonds, undertakings and other instruments of similar nature as follows: Without Limitations.

Such insurance policies, surety bonds, undertakings and instruments for said purposes, when duly executed by the aforesaid Attorney-in-Fact, shall be binding upon the said Company as fully and to the same extent as if signed by the duly authorized officers of the Company and sealed with its corporate seal; and all the acts of said Attorney-in-Fact, pursuant to the authority hereby given, are hereby ratified and confirmed.

This appointment is made pursuant to the following By-Laws which were duly adopted by the Board of Directors of the said Company on December 8th, 1927, and are still in full force and effect:

### ARTICLE IX. SECTION 1:

"Policies, bonds, recognizances, stipulations, consents of surety, underwriting undertakings and instruments relating thereto, Insurance policies, bonds, recognizances, stipulations, consents of surety and underwriting undertakings of the Company, and releases, agreements and other writings relating in any way thereto or to any claim or loss thereunder, shall be signed in the name and on behalf of the Company

(a) by the President, a Vice President or a Resident Vice President and by the Secretary, an Assistant Secretary, Resident Secretary or a Resident Assistant Secretary; or

(b) by an Attorney-in-Fact for the Company appointed and authorized by the President or a Vice President to make such signature; or

(c) by such other officers or representatives as the Board may from time to time determine.

The seal of the Company shall if appropriate be affixed thereto by any such officer, Attorney-in-Fact or representative."

IN WITNESS WHEREOF, SEABOARD SURETY COMPANY has caused these presents to be signed by its Vice-President, and its corporate seal to be hereunto affixed and duly attested by its Assistant Secretary, this 20th day of April, 19 70

Attest:

SEABOARD SURETY COMPANY,  
By

(Seal) John C. Whiteside  
Assistant Secretary

W. S. Wehrell  
Vice-President

STATE OF NEW YORK }  
COUNTY OF NEW YORK } ss.:

On this 20th day of April, 19 70, before me personally appeared W. S. Wehrell Vice-President of SEABOARD SURETY COMPANY, with whom I am personally acquainted, who, being by me duly sworn, said that he resides in the State of New Jersey; that he is Vice-President of SEABOARD SURETY COMPANY, the corporation described in and which executed the foregoing instrument; that he knows the corporate seal of the said Company; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said Company; and that he signed his name thereto as Vice-President of said Company by like authority.

(Seal)

STATE OF NEW YORK }  
COUNTY OF NEW YORK } ss.:

I, Ellen M. Sala

SEABOARD SURETY COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a power of attorney executed by said SEABOARD SURETY COMPANY, which is still in full force and effect.

Violet Johnson  
State of New York Notary Public  
No. 24-7104540 Qualified in Kings County  
Cert. filed in New York County  
Commission Expires March 30, 1972

Asst. Secretary of

IN WITNESS WHEREOF, I have signed this certificate at New York, New York, this 18th day of September, 19 70

Ellen M. Sala  
Assistant Secretary



# ORGANIZATION REPORT

RECEIVED

MAR 23 1982

Full Name of the Company, Organization, or Individual

Energy Reserves Group, Inc.

Post Office Address (Box or Street Address)

P. O. Box 1201, 217 North Water, Wichita, Kansas 67201

Plan of Organization (State whether organization is a corporation, joint stock association, firm or partnership, or individual)

Corporation

Purpose of Organization (State type of business in which engaged)

Oil and Gas Exploration and Production

If a reorganization, give name and address of previous organization.

If a foreign corporation, give  
(1) State where incorporated

Delaware

(2) Name and post office address of state agent

C. T. Corporation System  
14 North 18th Avenue  
Phoenix Airzona 85507

(3) Date of permit to do business in state

8-12-70

Principal Officers or Partners (if partnership)  
NAME

TITLE

POST OFFICE ADDRESS

SEE ATTACHED

DIRECTORS NAME

POST OFFICE ADDRESS

SEE ATTACHED

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Assistant Treasurer of the Corporation (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature

Severin P. Younker

3-12-82

Date

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

Organization Report  
File One Copy

Form No. 1

March 3, 1982

Page 1

ENERGY RESERVES GROUP, INC.  
DIRECTORS AND OFFICERS

Paul H. Woods, Chmn. of the Board  
1039 First National Bank Bldg.  
Wichita, Kansas 67202

Richard W. Volk, Director, President & CEO  
P. O. Box 1201 - 217 North Water  
Wichita, Kansas 67201

A. S. Bonner, Jr., Director, V. P. Exploration  
601 Jefferson Street  
Suite 1900  
Houston, Texas 77001

Clinton O. Engstrand, Director  
~~Hardage~~ Center, Suite 300  
100 South Main  
Wichita, Kansas 67202

Paul O. Gaddis, Director  
University of Texas at Dallas  
School of Management  
P. O. Box 688  
Mail Station Green 23  
Richardson, Texas 75080

Merrill W. Haas, Director  
10910 Wickwild  
Houston, Texas 77024

John A. Hill, Director  
One Park Plaza  
Nashville, Tennessee 37203

John J. Smith, Director  
Sparton Corporation  
2400 East Ganson Street  
Jackson, Mississippi 39202

William H. Wendel, Director  
Carborundum Center  
P. O. Box 156  
Niagra Falls, New York 14302

Robert A. Brooks, V. P. Minerals & Mining  
1746 Cole Blvd., Suite 250  
Golden, Colorado 80401

Dennis W. Loughridge, V. P. Corp. Dev. & Info Systems  
P. O. Box 1201 - 217 N. Water  
Wichita, Kansas 67201

Clark R. Mandigo, V. P. Secretary & General Counsel  
P. O. Box 1201 - 217 N. Water  
Wichita, Kansas 67201

March 3, 1982

Page 2

ENERGY RESERVES GROUP, INC.  
DIRECTORS AND OFFICERS

Reginald D. Orr, V. P. Production  
P. O. Box 1201 - 217 N. Water  
Wichita, Kansas 67201

Jack P. Revell, V. P. Finance & Adm.  
P. O. Box 1201 - 217 N. Water  
Wichita, Kansas 67201

December 22, 1977

Memo to File: Energy Reserves Group  
Navajo "0" #9  
Permit No. 687

From: John Bannister, Executive Secretary

Dean Barnes called at 10:00 a.m. this date and reported that the Barker Creek formation had been perforated from 5653' to 5657' and from 5730' to 5734'. 250 gallons of acid were pumped in at the rate of 1 gal. per 2/10 minutes under 4000 lbs. pressure. Response was negligible. Operator allowed formation to soak one hour, still no particular response. Indicated porosity of zones perforated was 2%.

Operator used 30 sacks of cement to plug back to 5550'. Apparently the cement crew mixed the cement unusually heavy and top cement was 5637', being 16' above top of perforations. Phil McGrath, USGS, felt that since the formations perforated were so tight and the cement used was so heavy, this plug back job would be OK. I verbally approved the cementing as being acceptable to the Commission.

It should be noted that in the cementing job instead of getting 1.5' per sack of cement, the operator (B J Service Company) got only approximately 0.8' per sack.

The operator intends to perforate the Desert Creek, coming in at approximately 5355' (300' above present perforations). Barnes indicated that the Desert Creek and the Ismay are separated by approximately 50' of shale in this well.

~~Currently, the plug back td of this well is 5500'.~~



November 14, 1977

Energy Reserves Group, Inc.  
P.O. Box 3280  
Casper, Wyoming 82601

Gentlemen:

Attached is your approved Application to Drill your Navajo  
"0" No. 9, your drilling permit and receipt for the \$25.00  
filing fee.

If we can be of any assistance, please advise.

Very truly yours,

W. E. Allen  
Director  
Enforcement Section

/vb  
Enc.